

The connection between Intangible Asset and Organization Performance listed on Tehran Stock Exchange

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ABSTRACT

This paper follows an empirical approach to test the relationship between degree of Intellectual capital as main intangible assets and organization performance. It is important for shareholders to understand which factors influence firms' performance. All the data are based on 100 listed financial firms' performance in Tehran stock exchange from 2014 to 2016. The main objective of this paper is to estimate of association between Intellectual Capital as a main Intangible assets and Organization Performance listed on the Stock Exchange in Tehran. As a result, there is equal significance for Customer Service, Quality, Productivity, Innovation and Ideals and Values lead in Organization Performance of financial Companies. Although in this study, intangible asset only with customer service, quality and innovation in Organization Performance are strictly allied in Financial Companies but doesn't have allied with productivity and value in organization performance.

Key Words: Intangible asset, Organization Performance, Intellectual Capital,

INTRODUCTION

In today's world, behind the industrial economy and new economy based on knowledge is highlighted. An economy in which production and exploitation of knowledge, plays a major role in the process of wealth creation (Chen Goh, 2005). The characteristics of the knowledge-based economy, massive investments in human capital and information and communications technology, and human capacity to produce knowledge is unlimited since, in the knowledge-based economy, presented an unlimited resource. The emergence of a knowledge-based economy, the increasing importance of intellectual capital as an intangible asset and an important source of competitive advantage a company (Rosorus, 1997).

Intangible asset as a key factor in maintaining a competitive advantage and better known companies and many researchers believe that the role of intellectual capital as the main resource of competitive benefit is increasingly (Edvinsson & Malone, 1997) Actually, era of the rule of information on communities and companies. The scientists of the twentieth century to century modern economy based on resource and tangible assets measured, but the twenty-first century as the century of knowledge economy based on intellectual capital is known. Information only your products or services produced in the economy or not to observe but to stay alive in the competitive economy to make value and innovate. A lot of experts believe that the most significant factor in the creation of intellectual capital to make value and added value to firms and their performance is suitable. Reality shows the importance of intellectual capital, the difference between the book value and market value, especially since the 80 AD after which, consistent with most financial analysts to increase the company's investment in intellectual capital is worried. It is noteworthy that during the 1980s to 1990s has expanded its investment in intellectual property (Lev & Zarowin, 1999). Due to the above, the recognition, valuation and managing of intellectual capital, it became vital for companies. Managers should be conscious of the intellectual capital of the company to efficiently manage the company's intellectual capital. Clients of the financial statements should also be conscious of the intellectual capital of the company to forecast the company's future and get conscious decisions. After recognizing and valuing right intellectual capital firms both for directors and for users of financial statements, which are necessary to the day on added significance (Campbell & Abdul-Rahmani, 2010) In this study, given the rising importance of intellectual capital, to explore the relationship between intellectual capital The market value of companies listed in Tehran Stock Exchange was discussed. The results of this research is

useful for managers, because study shows that managers should be aware of the value of intellectual capital and know that knowledge is a key factor for increasing the company's ability to remain competitive in the market today.

LITERATURE REVIEW

Anvari Rostami and Serajy (2006), to assess the relationship between intellectual capital and the market value of stocks have the Tehran Stock Exchange. In this study, five quantitative variables used to measure intellectual capital. The result of this study, the importance of intellectual capital, understanding the importance of the value of intellectual capital investors and high correlation with the market value of shares of the Stock Exchange in Tehran.

Qelichly, khodadad Hosseini and mosaics (2007), in a case study to examine the role of intellectual capital to create competitive advantage. In this research case study of two Iranian automaker, has been used. The results showed that the intellectual capital of the two companies and their competitive advantage and there is a significant positive relationship. Sepehr doust (2007), in his study examines the relationship between intellectual capital with pre-tax profit, operating cash flow and added value as an indicator of evaluating the performance of companies listed in Tehran Stock Exchange during the years 2005 to 2007 deals. To investigate the relationship between intellectual capital, operating cash flows and value-added companies, the form has become Douglas production function and to evaluate the significance of the bilateral relationship of cause and effect between the independent and dependent variables descriptive of Granger causality test was used. The results of the estimation model for selected companies shows that during the study period, the operating cash flows, and value-added intellectual capital and a significant positive relationship existed.

Shojaei and Baghbanian (2010), a case study to investigate the relationship between intellectual capital and organizational performance Kurdistan province of Iran's banking industry. In this study valid psychometric questionnaire that the original version and run it the first time in Canada, is used. The final estimated model shows a positive impact on the performance of each component of intellectual capital that the banking industry's human capital, structural capital and customer capital are the most effective.

Hadavi (2012), the effect of intellectual capital on the financial performance of companies, using Pulic to measure intellectual capital and the use of performance evaluation criteria examined. The sample included 100 companies listed in the Tehran Stock Exchange, over the years 1380 to 1389 is. The results of this study showed that there is a positive correlation between intellectual capital and corporate financial performance.

Hemati and Mehrabi (2012), examines the relationship of intellectual capital financial returns listed companies in stock exchange and Pulic method was used to measure intellectual capital. The sample included 146 companies listed in the Stock Exchange, for a period of 5 years from 2006 to 2010 is. The results of this study showed that between intellectual capital and financial performance and the future performance of the company there is a positive correlation. Also, the share of intellectual capital in the company's future performance is different in different industries. The results also showed that the rate of growth of intellectual capital and future performance of the company there is no relationship.

Juma and Payne (2004), the relationship between intellectual capital and firm performance specifically for high-tech companies with their emphasis. But argue that this relationship clearly is not clear and more experimental work confirmed the existence of this relationship should be, or at least more quantitative measurements to be performed.

Helena and Tanja (2007), in his study on the impact of IC components of financial performance in the hospitality industry began in Slovenia. The results showed that a positive relationship between the components of intellectual capital and financial performance in the industry there. Secondly capital as compared to other components of intellectual capital, has a higher impact factor is on financial performance.

Huang and Wang (2008), the effects of economic value and also their intellectual capital on the market and concluded that EVA-based income as well as profit-based GAAP, does not have the ability to explain the changes in the market value of a company, in addition to It concluded that intellectual capital will provide additional information for evaluating stocks.

No (2010), to review and explain the relationship between intellectual capital and success of the company's performance in which 775 company-years between 1996 and 2006 were studied. The results suggest that human capital has a significant positive relationship between human capital and structural capital, and in addition to the company's performance is also a significant positive relationship. However, this research is strong evidence to prove the existence of a positive relationship between capital structure and corporate performance there. The results of this research, the need for better output variables of structural funds that have not yet presentation of financial statements. In this study, the method for calculating the components of intellectual capital Pulic is used, as well as performance measurement methods, ROA, ROE, and changes in the company's sales.

Problem Statement :

Concerning the considerable significance of IC and knowledge resources as a cornerstone of competitive advantage, a variety of different academic fields have suggested the significant association between IC and performance (Grindley &

Teece, 1997; Menor, Kristal, & Rosenzweig, 2007; Subramaniam & Youndt, 2005). However, managers still experience ineffectiveness in the utilization of IC (Edvinsson & Sullivan, 1996). The absolute majority of the managers who participated in a survey carried out by the Economist and Accenture in 2003, asserted that handling intangible resources are considered as the fundamental driver towards competitive advantage. Nonetheless, most of the managers, i.e. 95 percent of the 120, competed that there is a whole lack of a robust scheme in their companies to measure intellectual capital and the made performance (Molnar, 2004). This issue in turn underlines this fact that theory and research seem to be ineffective so far in addressing how to explicate the nature of IC inside firms and the influence of the intangible resources on measurable performances. In effect, a precise conceptualization and definition of IC still remains disputable despite the general consensus about the importance of IC as a cornerstone for value creation. For example, Hudson (1993) narrows the scope of the idea to merely individual knowledge. Other researchers incorporate organizational relationships, routine, culture, infrastructure and intellectual property into the conceptualization of IC as well (Brooking, 1996; Roos and Roos, 1997).

Definitions of Intangible assets:

Intangible asset is an asset that needs physical stuff and mostly is very hard to calculate. It involves patents, copyrights, franchises, goodwill, trademarks and trade names. An asset that is not physical in nature. Corporate intellectual property (items such as patents, trademarks, copyrights, business methodologies), goodwill and brand detection are all common intangible assets in today's market. An intangible asset can be classified as either indefinite or exact depending on the particulars of that asset. A company brand name is believed to be an indefinite asset, as it continues with the company as long as the company carries on operations. But, if a company enters a legal deal to control under another company's patent, with no strategy of extending the accord, it would have a limited life and would be classified as a specific asset.

While intangible assets don't have the clear physical value of a factory or tools, they can prove very precious for a firm and can be dangerous to its long-term victory or failure. For instance, a company such as Coca-Cola wouldn't be almost as successful as it not for the high worth obtained through its brand-name gratitude. Although brand recognition is not a physical asset we are able to see or touch, its positive belongings on bottom-line profits can confirm extremely precious to firms such as Coca-Cola, whose brand strength drives universal sales year after year.

Intangible asset is a particular non-monetary asset with no physical substance. An asset is a reserve that is controlled by the unit as a result of past events (for instance, purchase or self-creation) and from which prospect economic profit (inflows of cash or another assets) are expected. Therefore, the three critical qualities of an intangible asset are Identifiable, Control (power to obtain benefits from the asset) and Outlook economic benefits (such as revenues or reduced future costs). An intangible asset is identifiable when it is separable (capable of being separated and sold, licensed, transferred, rented, or exchanged, either independently or together with a connected contract) or happens from contractual or more legal rights, regardless of whether those rights are moveable or separable from the entity or starting other rights and obligations.

Exemplar of intangible assets are Computer software, patented technology, databases and trade secrets, Trade dress, trademarks, newspaper mastheads, internet domains, Video and audiovisual material (e.g. motion pictures, television programs), Advance servicing rights, Customer lists, Licensing, royalty and standstill agreements, Import shares, Franchise agreements, Customer and supplier relations (including customer lists) and Marketing rights.

Intangibles can be acquired By separate buy, By replace of assets, As part of a business combination, By a government grant and By self-creation (internal generation).

Definitions of Intellectual Capital:

Edvinsson & Malone (1997) intellectual capital as knowledge-based process that includes tests, functional, organizational technology, customer relationships and professional skills are introduced that increase company competitiveness and profitability, it is the future. They believe that intellectual capital includes two aspects of human capital and structural. Stewart (1995) intellectual capital as knowledge that the path of growth and progress, are introduced. The basis of his theory of intellectual capital was later divided. Stewart (1997) stated that the human and intellectual capital structure, but the customer capital, structural capital is on equal footing with. He institutional asset related to capital structure and capital structure considered as a subset. He believed that many of the Companies of all three subtypes of intellectual capital, but according to the type and location of one of the aspects of intellectual capital is stronger and more important.

1. Human capital: Includes qualifications, skills, experience and intellectual capacity employees (Stewart, 1997; Edvinsson & Sullivan, 1996; Bounfour, 2002; Brooking, 1996; Edvinsson & Malone 1997; Roos et al., 1997).

2. Capital structure: Including processes, systems, structures, intellectual property and other intangible assets that are owned, but not shown in the balance sheet. (Bounfour, 2002; Brooking, 1996; Edvinsson & Malone, 1997; Roos et al., 1997; Stewart 1997)

3. Customer capital: The remaining intellectual capital, customer capital that dates back to the individual and organizational levels. Customer capital is a subset of intellectual capital and knowledge network is a group that includes the knowledge that there is a communication network derived), Edvinsson & Malvnh 1997; Roos et al., 1997; Stewart, 1997 (. This relationship is not limited to a particular communication, but communication with customers, suppliers, shareholders and other individuals associated with organizations involved (*Bounfour, 2002; Edvinsson & Malone, 1997; Roos et al., 1997*).

In all definitions visible correlation between human capital, structural and customer be seen. Many studies have considered the intellectual capital of the division. In fact, the correlation between the sub's under a title with the name of the organization's intellectual capital are (*Brooking, 1996; Roos et al., 1997*)

Intangible assets and company's performance:

Riahi-Belkaoui (2003) stated that intellectual capital of sampled multinational companies in USA is positively associated with their financial performance. Megna and Klock (1993) found that the intangible assets can contribute to the value of Tobin's Q. Lantz and Sahut (2005) stated that there is a positive correlation between R&D expenditures and firm's market value. Erawati and Sudana (2005) revealed that intangible assets would affect the firm's financial performance which is reflected in firm's return and income. Appelbaum et al. (2017) stated that intangible assets affect agility and business performance as well. Kothari et al. (2002) found that when R&D expense increases, the firms' future earning will increase as well.

Objective and Hypothesis of study:

The objective of this study is to estimate of association between Intellectual Capital as a main Intangible assets and Organization Performance. For this purpose we have six hypothesizes as follows:

- H1: Intellectual Capital and customer service are strictly allied in Financial Companies.
- H2: Intellectual Capital and Quality are strictly allied in Financial Companies.
- H3: Intellectual Capital and Productivity are strictly allied in Financial Companies.
- H4: Intellectual Capital and Innovation are strictly allied in Financial Companies.
- H5: Intellectual Capital and Ideals and Values are strictly allied in Financial Companies
- H6: Intellectual Capital and Organization Performance are strictly allied in Financial Companies.

RESEARCH METHOD AND SAMPLING

The designation of the current research is connection between Intangible Asset and Organization Performance listed on Tehran Stock Exchange. In order to make the study more meaningful, the researcher has relied financial institutions in Tehran. Primary data was used to make the analysis systematically. The data are based on real information and figures of stock exchange. Theoretical bases were collected from Persian and English texts and books and required data by referring to financial statements, explanatory notes, weekly and monthly reports of Tehran stock exchange between different Financial companies and during the time period 2014 to 2016 and it is worth to say that the variables are calculated by Excel software and the results will be discussed by SPSS software as well as outputs. The rationale of the current research is to examine the connection between Intangible Asset and Organization Performance listed on Tehran Stock Exchange.

Primary data were collected from the officials of Financial Companies in Tehran through structured questionnaire. The questionnaire was designed after it was conferred with the experts in the field of financial Companies. Based on their ideas, some items were erased and some items were customized. The secondary data are collected from various publications of the SLBC, State Planning Board, Department of Economics and Statistics, published and unpublished reports, documents, articles, working papers, published and unpublished research dissertations and from the relevant websites. A structured questionnaire was designed to collect data from the officials of Financial institutions in Tehran. All the data are based on 100 listed financial firms' performance in Tehran stock exchange from 2014 to 2016.

RESULTS

Table 1: H1 Linear Regression Analysis- Intellectual Capital with Customer Service

<i>ANOVAs test</i>				
<i>Source</i>	<i>SS</i>	<i>df</i>	<i>MS</i>	<i>F</i> 0.00 <i>p-value</i> .9539
Regression	0.0002	1	0.0002	
Residual	16.8027	98	0.0573	
Total	16.8029	99		
Result			Not Significant	

Regression output				
variables	coefficients	std. error	t (df=293)	p-value
Intercept	4.0720	0.3797	10.725	0.000
Intellectual Capital	-0.0051	0.0883	-0.058	.9539

Source-Primary data

Table 1 is showing ANOVA test value for the above table shows that 0.000; P Value is 0.9539, ($P > 0.05$), H_0 formulated in this regard is accepted. That means there is no significant difference between Independent variable and dependent variable. That is Intellectual Capital has no control over Customer Service, as it is clearly evidence from adjusted R Square value of 0.05%. Coefficient is examined with (OLS) model as per B values. The t test value is 10.725 and p value is 0.000 ($p < 0.05$), there is influence of intercept with Customer Service, but t test value is -0.058 and p value is 0.9539 ($p > 0.05$), there is no influence of Intellectual Capital with Customer Service.

Table 2: H2 Linear Regression Analysis- Intellectual Capital with Quality

Anova test				
Source	SS	df	MS	F
Regression	0.0272	1	0.0272	0.53
Residual	14.9593	98	0.0511	
Total	14.9864	99		
				p-value
				0.4664
Result				Not Significant
Regression output				
variables	coefficients	std. error	t (df=293)	p-value
Intercept	3.8988	0.3582	10.884	0.0000
Intellectual Capital	0.0608	0.0833	0.729	.4664

Source-Primary data

Table 2 is showing Anova test value for the above table shows that 0.53; P Value is 0.4664, ($P > 0.05$), H_0 formulated in this regard is accepted. That means there is no significant difference between Independent variable and dependent variable. That is Intellectual Capital has no control over Quality, as it is clearly evidence from adjusted R Square value of 0.2%. Now it is inevitable to know whether the difference between independent variable and dependent variable is due to one independent variable or both, for which Coefficient is examined with (OLS) model as per B value. The t test value is 10.884 and p value is 0.000 ($p < 0.05$), there is influence of intercept with Quality, but t test value is 0.729 and p value is 0.4664 ($p > 0.05$), there is no influence of Intellectual Capital with Quality.

Table 3: H3 Linear Regression Analysis- Intellectual Capital with Productivity

ANOVAs test				
Source	SS	df	MS	F
Regression	2.0174	1	2.0174	31.17
Residual	18.9606	98	0.0647	
Total	20.9780	99		
				p-value
				0.000
Result				Significant
Regression output				
variables	coefficients	std. error	t (df=293)	p-value
Intercept	1.7960	0.4033	4.453	0.0000
Intellectual Capital	0.5237	0.0938	5.583	0.0

Source-Primary data

Table 3 is showing Anova test value for the above table shows that 31.17; P Value is 0.000, ($P < 0.05$), H_0 formulated in this regard is rejected. That means there is significant difference between Independent variable and dependent variable. That is Intellectual Capital has control over Productivity, as it is clearly evidence from adjusted R Square value of

9.6%. Now it is inevitable to know whether the difference between independent variable and dependent variable is due to the difference of independent variable or not, for which Coefficient is examined with (OLS) model as per B values. The t test value is 4.453 and p value is 0.000($p < 0.05$), there is influence of intercept with Productivity, similarly t test value is 5.583 and p value is 0.000 ($p < 0.05$), there is influence of Intellectual Capital with Productivity.

Table 4: H4 Linear Regression Analysis- Intellectual Capital with Innovations

<i>ANOVAs test</i>				
<i>Source</i>	<i>SS</i>	<i>df</i>	<i>MS</i>	<i>F</i>
Regression	0.0301	1	0.0301	0.31
Residual	28.1762	98	0.0962	
Total	28.2064	99		<i>p-value</i> 0.5760
<i>Result</i>			<i>Not Significant</i>	
<i>Regression output</i>				
<i>variables</i>	<i>coefficients</i>	<i>std. error</i>	<i>t (df=293)</i>	<i>p-value</i>
<i>Intercept</i>	4.0097	0.4916	8.156	0.000
<i>Intellectual Capital</i>	0.0640	0.1143	0.560	.5760

Source-Primary data

Table 4 is showing Anova test value for the above table shows that 0.31; P Value is 0.5760, ($P > 0.05$), H_0 formulated in this regard is accepted. That means there is no significant difference between Independent variable and dependent variable. That is Intellectual Capital has no control over Innovations, as it is clearly evidence from adjusted R Square value of 0.1%. Coefficient is examined with (OLS) model as per B values. The t test value is 8.156 and p value is 0.000($p < 0.05$), there is influence of intercept with Innovations, but t test value is 0.560 and p value is 0.5760($p > 0.05$), there is no influence of Intellectual Capital with Innovations.

Table 5: H5 Linear Regression Analysis- Intellectual Capital with Ideals and Values

<i>ANOVAs test</i>				
<i>Source</i>	<i>SS</i>	<i>df</i>	<i>MS</i>	<i>F</i>
Regression	0.5402	1	0.5402	9.80
Residual	16.1481	293	0.0551	
Total	16.6883	294		<i>p-value</i> 0.0019
<i>Result</i>			<i>Significant</i>	
<i>Regression output</i>				
<i>variables</i>	<i>coefficients</i>	<i>std. error</i>	<i>t (df=293)</i>	<i>p-value</i>
<i>Intercept</i>	3.1939	0.3722	8.581	0.000
<i>Intellectual Capital</i>	0.2710	0.0866	3.131	.0019

Source-Primary data

Anova test value for the above table shows that 9.80; P Value is 0.0019, ($P < 0.05$), H_0 formulated in this regard is rejected. That means there is significant difference between Independent variable and dependent variable. That is Intellectual Capital has control over Ideals and Values, as it is clearly evidence from adjusted R Square value of 3.2%. Now it is inevitable to know whether the difference between independent variable and dependent variable is due to the difference of independent variable or not, for which Coefficient is examined with (OLS) model as per B values. The t test value is 8.581 and p value is 0.000 ($p < 0.05$), there is influence of intercept with Ideals and Values, similarly t test value is 3.131 and p value is 0.0019 ($p < 0.05$), there is influence of Intellectual Capital with Ideals and Values.

Table 6: H6 Linear Regression Analysis- Intellectual Capital with Organization Performance

<i>ANOVAs test</i>				
<i>Source</i>	<i>SS</i>	<i>df</i>	<i>MS</i>	<i>F</i>
Regression	0.2877	1	0.2877	11.74
Residual	7.1797	293	0.0245	
Total	7.4675	294		<i>p-value</i>

				0.0007
	<i>Result</i>			<i>Significant</i>
<i>Regression output</i>				
<i>variables</i>	<i>coefficients</i>	<i>std. error</i>	<i>t (df=293)</i>	<i>p-value</i>
Intercept	3.3315	0.2482	13.424	0.000
Intellectual Capital	0.1978	0.0577	3.427	.0007

Source-Primary data

Table 6 is showing Anova test value for the above table shows that 11.74; P Value is 0.0007, ($P < 0.05$), H_0 of independent variable or not, for which Coefficient is examined with (OLS) model formulated in this regard is rejected. That means there is significant difference between Independent variable and dependent variable. That is Intellectual Capital has control over Organisation Performance, as it is clearly evidence from adjusted R Square value of 3.9%. Now it is inevitable to know whether the difference between independent variable and dependent variable is due to the difference del as per B values. The t test value is 13.424 and p value is 0.000 ($p < 0.05$), there is influence of intercept with Organisation Performance, similarly t test value is 3.427 and p value is 0.0007 ($p < 0.05$), there is influence of Intellectual Capital with Organisation Performance.

Finding:

There is equal significance for Customer Service, Quality, Productivity, Innovation and Ideals and Values lead in Organization Performance of Financial Companies. There is no significant ample scope for Intellectual Capital in Financial Companies. Intellectual Capital only with customer service, quality and innovation in Organization Performance are strictly allied in Financial Companies. Intellectual Capital only with customer service, quality and innovation in Organization Performance are strictly allied in Financial Companies but doesn't have allied with productivity and value in organization performance.

LIMITATIONS OF THE STUDY AND SUGGESTIONS

“No matter how hard one tries to be perfect, perfection is nothing we could ever reach”. In spite of its gifts, this research is also subject to some potential limits in terms of internal and external authority. These limits could be considered in subsequent studies which may focus on studying the relationships among variables used in this study as well as in related areas of research. First and foremost, the instrument of the study was the questionnaire survey which this consequently made the study as a whole relies seriously on the perception and opinions of companies' chief financial officers who participated in the survey as the key informants. Even now the research's instrument was tested either in terms of the reliability or the validity, there should exist some type of bias when the key informants assess their own performance. The bias could have been alleviated if external parties such as customers, suppliers, allied partners, and competitors, who are classified under the organization's relational networks, were questioned to assess the firm's performance. Besides, it would be beneficial if there was a possibility to analyze the annual reports to verify the information provided by the respondents. In that case, the quite high number of organizations puts obstacle in the way of the researcher trying to do so.

Another reason for this is that although performance was evaluated via a subjective instrument, both financial and nonfinancial indicators were included. That is, performance was addressed and measured along multiple dimensions under two broad categories (financial and nonfinancial performance) rather than on any single dimension. However, the findings must be interpreted with caution concerning the possibility of bias despite the fact ample evidence corroborated the consistent results between objective and subjective measurement. Secondly, the data presented in this research is regarded cross-sectional or one-shot. Those critical factors were captured and measured just once and at a static point instead of as they were developing, thereby missing the value of time explanation. It is imperative to attach importance to long-term effects, particularly on the creation and development of the intellectual capital as well as the evolution of PMS and organizational culture. Besides, survey data derived from cross sectional analyses is incapable of producing conclusive evidence of causality. Instead, the evidence should be regarded in line with theoretical arguments and expected associations.

Future research could embark longitudinal survey in order to investigate the causality and interrelationships among factors which are pivotal to intellectual capital and PMS. Finally, the data was collected in a single country (Iran). Potential culture limitations should be noted, especially the cultural differences among developing countries and developed nations that influence the perceptions of knowledge sharing and management accounts practices. The framework of the study must be examined further through including samples from other countries to generalize or modify the concepts. In addition, national cultural differences potentially could affect manpower's perceptions in relation to some important activities related to intellectual capital (e.g. knowledge sharing) and further investigation could offer a more conclusive hypotheses-testing. Moreover, concerning the concept of organizational culture, despite

an acceptable reliability and validity of the instruments, richness could not be completely acquired via a survey instrument as organizational culture is perceived as a broad construct

REFERENCE

- [1]. Aaker, David A, Kumar, V, & Day, George S. (2007). *Marketing research: Wiley Hoboken, NJ.*
- [2]. Abdallah, Wagdy Moustafa. (2001). *Managing multinationals in the Middle East: Accounting and tax issues: Greenwood Publishing Group.*
- [3]. Abernethy, Margaret A, & Bouwens, Jan. (2005). *Determinants of accounting innovation implementation. Abacus, 41(3), 217-240.*
- [4]. Agarwal, Ritu, & Karahanna, Elena. (2000). *Time flies when you're having fun: cognitive absorption and beliefs about information technology usage 1. MIS quarterly, 24(4), 665-694.*
- [5]. Bagozzi, Richard P, & Edwards, Jeffrey R. (1998). *A general approach for representing constructs in organizational research. Organizational Research Methods, 1(1), 45-87.*
- [6]. Bagozzi, Richard P, & Heatherton, Todd F. (1994). *A general approach to representing multifaceted personality constructs: Application to state self-esteem. Structural Equation Modeling: A Multidisciplinary Journal, 1(1), 35-67.*
- [7]. Baines, Annette, & Langfield-Smith, Kim. (2003). *Antecedents to management accounting change: a structural equation approach. Accounting, organizations and society, 28(7), 675-698.*
- [8]. Baker, Kathryn A. (2002). *Organizational Culture 1.*
- [9]. Cabrita, Maria Do Rosario, & Bontis, Nick. (2008). *Intellectual capital and business performance in the Portuguese banking industry. International Journal of Technology Management, 43(1), 212-237.*
- [10]. Cameron, Kim S. (1986). *Effectiveness as paradox: Consensus and conflict in conceptions of organizational effectiveness. Management science, 32(5), 539-553.*
- [11]. Campbell, Donald T, & Fiske, Donald W. (1959). *Convergent and discriminant validation by the multitrait-multimethod matrix. Psychological bulletin, 56(2), 81.*
- [12]. Cardinal, Laura B. (2001). *Technological innovation in the pharmaceutical industry: The use of organizational control in managing research and development. Organization Science, 12(1), 19-36.*
- [13]. Cavana, Robert Y, Delahaye, Brian L, & Sekaran, U. (2001). *Applied business research. Qualitative and Quantitative Methods.*
- [14]. David, W, Long, De, & Fahey, Liam. (2000). *Diagnosing cultural barriers to knowledge management. The Academy of Management Executive (1993-2005), 113-127.*
- [15]. Davis, Stan, & Albright, Tom. (2004). *An investigation of the effect of balanced scorecard implementation on financial performance. Management Accounting Research, 15(2), 135-153.*
- [16]. De Carolis, D. (2002). *The role of social capital and organizational knowledge in enhancing entrepreneurial opportunities in high-technology environments. The strategic management of intellectual capital and organizational knowledge, 699-709.*
- [17]. De Dreu, Carsten KW. (1997). *Productive conflict: The importance of conflict management and conflict issue. Using conflict in organizations, 9-22.*
- [18]. Dunk, Alan S, & Lyons, Arthur F. (1997). *An analysis of departmental effectiveness, participative budgetary control processes and environmental dimensionality within the competing values framework: a public sector study. Financial Accountability & Management, 13(1), 1-15.*
- [19]. Dwyer, F Robert, Schurr, Paul H, & Oh, Sejo. (1987). *Developing buyer-seller relationships. The Journal of marketing, 11-27.*
- [20]. Dyer, Jeffrey H, & Singh, Harbir. (1998). *The relational view: Cooperative strategy and sources of interorganizational competitive advantage. Academy of management review, 23(4), 660-679.*
- [21]. Ehin, Charles. (2000). *Unleashing intellectual capital: Routledge.*
- [22]. Ellinger, Alexander E, Musgrove, Carolyn Casey Findley, Ellinger, Andrea D, Bachrach, Daniel G, Elmadağ Baş, Ayşe Banu, & Wang, Yu-Lin. (2012). *Influences of organizational investments in social capital on service employee commitment and performance. Journal of Business Research.*
- [23]. English, Tony. (2001). *Tension analysis in international organizations: a tool for breaking down communication barriers. International Journal of Organizational Analysis, 9(1), 58-83.*
- [24]. Epstein, Marc J, & Manzoni, Jean-François. (1997). *The Balanced Scorecard and Tableau de Bord: a global perspective on translating strategy into action: Insead.*
- [25]. Figge, Frank, Hahn, Tobias, Schaltegger, Stefan, & Wagner, Marcus. (2002). *The sustainability balanced scorecard—linking sustainability management to business strategy. Business strategy and the Environment, 11(5), 269-284.*
- [26]. Fiol, C Marlene, & Lyles, Marjorie A. (1985). *Organizational learning. Academy of Management review, 10(4), 803-813.*
- [27]. Firer, Steven, & Williams, S Mitchell. (2003). *Intellectual capital and traditional measures of corporate performance. Journal of Intellectual Capital, 4(3), 348-360.*
- [28]. Fisher, Joseph. (1992). *Use of nonfinancial performance measures. Journal of Cost management, 6(1), 31-38.*
- [29]. Galbraith, Jay R. (1973). *Designing complex organizations: Addison-Wesley Longman Publishing Co., Inc. Galbraith, Jay R. (1983). Designing the innovating organization. Organizational dynamics, 10(3), 5-25.*
- [30]. George, D, & Mallery, M. (2003). *Using SPSS for Windows step by step: a simple guide and reference: Boston, MA: Allyn & Bacon.*
- [31]. Gerdin, Jonas. (2005). *The impact of departmental interdependencies and management accounting system use on subunit performance. European Accounting Review, 14(2), 297-327.*
- [32]. Gerdin, Jonas, & Greve, Jan. (2004). *Forms of contingency fit in management accounting research—a critical review. Accounting, Organizations and Society, 29(3), 303-326.*
- [33]. Gold, Andrew H, Malhotra, Arvind, & Segars, Albert H. (2001). *Knowledge management: an organizational capabilities perspective. J. of Management Information Systems, 18(1), 185-214.*
- [33]. Gupta, Anil K, & Govindarajan, Vijay. (2000). *Knowledge flows within multinational corporations. Strategic management journal, 21(4), 473-496.*

- [34]. Guthrie, James. (2001). *The management, measurement and the reporting of intellectual capital*. *Journal of Intellectual capital*, 2(1), 27-41.
- [35]. Hair, JF, Black, WC, & Babin, BJ. Anderson, re, & tatham, r. L.(2006). *Multivariate data analysis*.
- [36]. Hair, Joe F, Ringle, Christian M, & Sarstedt, Marko. (2011). *PLS-SEM: Indeed a silver bullet*. *The Journal of Marketing Theory and Practice*, 19(2), 139-152.
- [37]. Hair, Joseph F, Anderson, Rolph E, Tatham, Ronald L, & Black, William C. (1998). *Multivariate analysis*. Englewood: Prentice Hall International.
- [38]. Hall, Richard. (1992). *The strategic analysis of intangible resources*. *Strategic management journal*, 13(2), 135-144.
- [39]. Joiner, Therese A, Spencer, X Sarah Yang, & Salmon, Suzanne. (2009). *The effectiveness of flexible manufacturing strategies: the mediating role of performance measurement systems*. *International Journal of Productivity and Performance Management*, 58(2), 119-135.
- [40]. Jones, Gareth R, & George, Jennifer M. (1998). *The experience and evolution of trust: Implications for cooperation and teamwork*. *Academy of management review*, 531-546.
- [41]. Joreskog, Karl G, & Wold, Herman. (1982). *Contributions to Economic Analysis Systems Under Indirect Observation-Causality-Structure-Prediction: North Holland*.
- [42]. Karimi, Jahangir, Somers, Toni M, & Gupta, Yash P. (2004). *Impact of environmental uncertainty and task characteristics on user satisfaction with data*. *Information Systems Research*, 15(2), 175-193.
- [43]. Kennedy, C. (2001). *The next big idea: managing in the digital economy: London, Random House Business Books*.
- [44]. Kerr, Steven, & Slocum, John W. (1981). *Controlling the performances of people in organizations*. *Handbook of organizational design*, 2, 116-134.
- [45]. Ketokivi, Mikko, & Schroeder, Roger G. (2004). *Perceptual measures of performance: fact or fiction?* *Journal of Operations Management*, 22(3), 247-264.
- [46]. Molnar, Michael J. (2004). *Executive Views on Intangible Assets: Insights from the Accenture Economist Intelligence Unit Survey*, *Accenture Research Note Intangible Assets and Future Value*.
- [47]. Moorman, Christine, Deshpande, Rohit, & Zaltman, Gerald. (1993). *Factors affecting trust in market research relationships*. *The Journal of Marketing*, 81-101.
- [48]. Morgan, Robert M, & Hunt, Shelby D. (1994). *The commitment-trust theory of relationship marketing*. *the journal of marketing*, 20-38.
- [49]. Nonaka, Ikujiro. (1994). *A dynamic theory of organizational knowledge creation*. *Organization science*, 5(1), 14-37.
- [50]. Nonaka, Ikujiro, & Takeuchi, Hirotaka. (1996). *The knowledge-creating company: How Japanese companies create the dynamics of innovation*. *Long Range Planning*, 29(4), 592.
- [51]. Simons, Robert. (1994b). *Levers of control: how managers use innovative control systems to drive strategic renewal: Harvard Business Press*.
- [52]. Tsai, Wenpin, & Ghoshal, Sumantra. (1998). *Social capital and value creation: The role of intrafirm networks*. *Academy of management Journal*, 464-476.
- [53]. Wernerfelt, Birger. (1984). *A resource-based view of the firm*. *Strategic management journal*, 5(2), 171-180.
- [54]. Yu, Zhu, & Yanfei, Wang. (2008). *Intellectual Capital in the Process of Organizational Culture to Firm Performance*. Paper presented at the *Wireless Communications, Networking and Mobile Computing, 2008. WiCOM'08. 4th International Conference on*.